

EXHIBIT C



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| Locke Lord LLP | | | EUSTAQUIO, CAL J | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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| Office Action Summary | Application No. 13/107,090 | Applicant(s) RAUTIAINEN, TERHI | |
| | Examiner CAL EUSTAQUIO | Art Unit 2683 | AIA (First Inventor to File) Status No |
| -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address -- | | | |
| Period for Reply | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. | | | |
| <ul style="list-style-type: none"> - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). <p>Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</p> | | | |
| Status | | | |
| <p>1) <input checked="" type="checkbox"/> Responsive to communication(s) filed on <u>13 May 2011</u>. <input type="checkbox"/> A declaration(s)/affidavit(s) under 37 CFR 1.130(b) was/were filed on _____. </p> <p>2a) <input type="checkbox"/> This action is FINAL. 2b) <input checked="" type="checkbox"/> This action is non-final.</p> <p>3) <input type="checkbox"/> An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.</p> <p>4) <input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213.</p> | | | |
| Disposition of Claims | | | |
| <p>5) <input checked="" type="checkbox"/> Claim(s) <u>1-18</u> is/are pending in the application.</p> <p>5a) Of the above claim(s) _____ is/are withdrawn from consideration.</p> <p>6) <input type="checkbox"/> Claim(s) _____ is/are allowed.</p> <p>7) <input checked="" type="checkbox"/> Claim(s) <u>1-18</u> is/are rejected.</p> <p>8) <input type="checkbox"/> Claim(s) _____ is/are objected to.</p> <p>9) <input type="checkbox"/> Claim(s) _____ are subject to restriction and/or election requirement.</p> | | | |
| <p>* If any claims have been determined <u>allowable</u>, you may be eligible to benefit from the Patent Prosecution Highway program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.</p> | | | |
| Application Papers | | | |
| <p>10) <input type="checkbox"/> The specification is objected to by the Examiner.</p> <p>11) <input checked="" type="checkbox"/> The drawing(s) filed on <u>13 May 2011</u> is/are: a) <input checked="" type="checkbox"/> accepted or b) <input type="checkbox"/> objected to by the Examiner.</p> <p style="margin-left: 20px;">Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).</p> <p style="margin-left: 20px;">Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</p> | | | |
| Priority under 35 U.S.C. § 119 | | | |
| <p>12) <input type="checkbox"/> Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</p> | | | |
| Certified copies: | | | |
| <p>a) <input type="checkbox"/> All b) <input type="checkbox"/> Some * c) <input type="checkbox"/> None of the:</p> <p>1. <input type="checkbox"/> Certified copies of the priority documents have been received.</p> <p>2. <input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____. </p> <p>3. <input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</p> | | | |
| <p>* See the attached detailed Office action for a list of the certified copies not received.</p> | | | |
| Interim copies: | | | |
| <p>a) <input type="checkbox"/> All b) <input type="checkbox"/> Some c) <input type="checkbox"/> None of the: Interim copies of the priority documents have been received.</p> | | | |
| Attachment(s) | | | |
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.</p> | | | |
| <p>3) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.</p> <p>4) <input type="checkbox"/> Other: _____.</p> | | | |

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DETAILED ACTION

Claim Rejection 35 USC 101

1. **Claim 18** recites, in part: “A computer program embodied on a computer readable medium comprising computer executable program code which, when executed by at least one processor of an apparatus, causes the apparatus to...”

While the specification at figure 6, elements 610-630 and [0075-77] discloses respectively that “The general structure of the apparatus 600 comprises a display 640, a vibrator 650, a radar 660, a communication interface 670, a movement sensor 680, a processor 610, and a memory 620 coupled to the processor 610. The apparatus 600 further comprises software 630 stored in the memory 620 and operable to be loaded into and executed in the processor 610. In some embodiments, the software 630 comprises one or more software modules and can be in the form of a computer program product. The apparatus 600 may further comprise a user interface controller 690 coupled to the processor 610” and “The memory 620 may be for example a non-volatile or a volatile memory, such as a read-only memory (ROM), a programmable read-only memory (PROM), erasable programmable read-only memory (EPROM), a random-access memory (RAM), a flash memory, a data disk, an optical storage, a magnetic storage, a smart card, or the like” –these recitations do not exclude signals per se for the claimed “computer program embodied on a computer readable medium.”

Accordingly, Office Policy with regards to non-transitory medium is as follows:

“The United States Patent and Trademark Office (USPTO) is obliged to give claims their broadest reasonable interpretation consistent with the specification during proceedings before the USPTO. See *In re Zletz*, 893 F.2d 319(Fed. Cir. 1989)(during patent examination the pending claims must be interpreted

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as broadly as their terms reasonably allow). The broadest reasonable interpretation of a claim drawn to a computer readable medium (also called machine readable medium and other such variations) typically covers forms of non-transitory tangible media and transitory propagating signals *per se* in view of the ordinary and customary meaning of computer readable media, particularly when the specification is silent. See MPEP 2111.01. When the broadest reasonable interpretation of a claim covers a signal *per se*, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. See *In re Nujiten*, 500 F.3d 1346, 1356-57 (Fed. Cir. 2007) (transitory embodiments are not directed to statutory subject matter) and *Interim Examination Instructions for Evaluating Subject Matter Eligibility Under 35 U.S.C. 101*, Aug. 24, 2009; p. 2.”

To overcome such 101 rejection, one suggestion is to amend the claim to:

“A non-transitory computer program embodied on a computer readable medium comprising computer storing executable program code which, when executed by at least one processor of an apparatus, [causes] the program causing the apparatus to...”

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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3. **Claims 1-9, and 11-17** are rejected under 35 U.S.C. 103(a) as being obvious over Logan, U.S. 2007/0037605.

On claim 1, Logan recites: A method comprising:

storing an association between a user notification and an event ([0019-21]) describes associating a person, location, or characteristics of an environment and providing a notification corresponding to the detected event. The detected event includes determining changes in ambient light, detecting a proximity of a person to the phone, or determining characteristics of an incoming phone call);

detecting the event by an apparatus (see the above);

detecting an external object in a range outside the apparatus in response to the detected event ([0022] recites controlling the cell phone in response to determining the position of the phone with respect to another object or person. Furthermore, the limitation “range outside the apparatus” is interpreted to mean any distance just outside the case or container of the apparatus); and

determining characteristics of the user notification based on the step of detecting said object ([0019] recites varying the light or vibration intensity responsive to the an alert. The detecting movement feature includes determining the location of persons near the phone).

Except for the claimed:

detecting movement of an external object in a range outside the apparatus in response to the detected event; and determining characteristics of the user notification based on the step of detecting movement.

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With respect to the above detecting and determining steps *based on detecting movement*, Logan, as recited above, includes determining the location of objects or persons located proximate to the cell phone. Logan does not specifically recite the detection of determination of object or personnel movement. However,

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to include into Logan the determination and detection of movements of persons or objects. It is known that object move relative to the position of a cell phone, such as personnel walking or objects, such as vehicles, moving. Measuring positional information would likely include detecting movement because movement is defined as a change in position with respect to time. One of ordinary skill in the art would have provided the feature of determining and detecting movement of an object or person as a means to allowing the user to better determine identify the detected object or person.

On claim 2, Logan recites: A method of **claim 1**, further comprising: detecting direction of the movement of the external object. See the rejection of **claim 1**.

On claim 3, Logan recites: A method of **claim 3**, wherein the direction of the movement of the external object is detected to be one of the following: approaching and moving away. [0134] recites determining if a person is walking toward the phone, which is the same thing as "approaching."

On claim 4, Logan recites: A method of **claim 1**, wherein the event is selected from a group consisting of: an incoming call; an incoming mail; a received short

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message; a calendar alarm; a missed call; an unread short message; and an updated news feed. [0019] recites providing an alert notification responsive to an incoming call.

On claim 5, Logan recites: A method of **claim 1**, wherein the user notification is selected from a group consisting of: a sound signal; a vibration signal; a light signal; and a text displayed on a display of the apparatus. [0019] recites varying the light or vibration intensity responsive to an alert.

On claim 6, Logan recites: A method of **claim 5**, characteristics of the user notification is selected from a group consisting of: a volume of the sound signal; a strength of the vibration signal; an availability of the light signal; and an availability of the text displayed. See the rejection of **claim 5**.

On claim 7, Logan recites: A method of **claim 1**, wherein the event is an incoming call to the apparatus; the user notification is a ringing tone; the characteristics of the user notification is a volume of the ringing tone; and the method further comprising: decreasing the volume of the ringing tone in response to the detected approaching movement of the external object in the range outside the apparatus. [0135] recites decreasing of a phone's ringer volume decreasing in response to a person walking towards the phone.

On claim 8, Logan recites except: A method of **claim 7**, further comprising: extending time for diverting the incoming call to a voicemail of the user in response to the detected approaching movement of the external object in the range outside the apparatus. Logan, [0145-148] recites adjusting the time to defaulting to voicemail an incoming call depending on the location of the user. Furthermore, [0142] recites

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switching the incoming call to voicemail based on the user's learned history of answering an incoming call.

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to include the user's approach to a phone. Logan, as above, includes the detection of the user's position with respect to the phone and adjusting the default to voicemail corresponding to the user's position with respect to the phone. Couple this with the likelihood that a user, upon hearing the phone ringing, would approach the phone to answer it, the outcome of these likely scenarios is that the reference as well as known user habits predicts the claimed invention with a likelihood of success.

On claim 9, Logan recites except: A method of **claim 7**, further comprising: displaying caller identification on a display of the apparatus in response to the detected approaching movement of the external object in the range outside the apparatus. Logan, [0164], recites providing enabling of the caller id response of the user contacting the phone. Furthermore, [0022] recites controlling the cell phone in response to determining the position of the phone with respect to another object or person. It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to include into Logan the option of providing caller ID responsive to the proximity of the user to the phone. As recited above, Logan includes this option in the form of physically handling the phone while other recited functions include providing adjustment of functions as a result of the user being proximate to the phone. Providing such a caller ID feature when the user is proximate to the phone would make the display relevant to the user as opposed to not showing the display when the user is absent.

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On claim 11, Logan recites: A method of **claim 1**, further comprising: detecting movement of the apparatus in response to the detected event. [0136] recites the portable phone being placed next to a Blue tooth associated device and controlling the phone's volume response to the phone's placement.

On claim 12, Logan recites: A method of **claim 11**, further comprising: determining the range outside the apparatus in response to the detected movement of the apparatus. [0075] recites adjusting the phone's functions when the user moves a certain distance. In this example, the user moves 100 feet.

On claim 13, Logan recites: An apparatus comprising: a movement detector configured to detect movement of an external object in a range outside the apparatus; at least one processor (figure 1, figure 2, and [0054-70] includes using a processor and program memory); and at least one memory including computer program code, the at least one memory and the computer program code being configured to, with the at least one processor, cause the apparatus at least to perform: store an association between a user notification and an event; detect the event; detect the movement of the external object in response to the detected event; and determine characteristics of the user notification based on the step of detecting movement. See the rejection of **claim 1** with respect to the functions associated with the above claimed elements.

On claim 14, Logan recites: The apparatus of **claim 13**, wherein the at least one memory and the computer program code are configured to, with the at least one processor, cause the apparatus to further perform: detect direction of the movement of the external object. [0134] recites determining if a person is walking toward the phone,

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which is the same thing as detecting a direction of the person with respect to the position of the phone.

On claim 15, Logan recites: The apparatus of **claim 13**, wherein the event is selected from a group consisting of: an incoming call; an incoming mail; a received short message; a calendar alarm; a missed call; an unread short message; and an updated news feed. [0019] recites providing an alert notification responsive to an incoming call.

On claim 16, Logan recites: The apparatus of **claim 13**, wherein the user notification is selected from a group consisting of: a sound signal; a vibration signal; a light signal; and a text displayed on a display of the apparatus. [0019] recites varying the light or vibration intensity responsive to an alert.

On claim 17: Logan recites: The apparatus of **claim 16**, wherein the characteristics of the user notification is selected from a group consisting of: a volume of the sound signal; a strength of the vibration signal; an availability of the light signal; and an availability of the text displayed. [0019] recites varying the light or vibration intensity responsive to an alert.

On claim 18: Logan recites: A computer program embodied on a computer readable medium comprising computer executable program code which, when executed by at least one processor of an apparatus (figure 1, figure 2, and [0054-70] includes using a processor and program memory), causes the apparatus to: store an association between a user notification and an event; detect the event; detect the movement of the external object in response to the detected event; and determine characteristics of the

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user notification based on the step of detecting movement. See the rejection of **claim**

1.

4. **Claim 10** are rejected under 35 U.S.C. 103(a) as being obvious over Logan, U.S. 2007/0037605 in view of Kam, U.S. 2003/0151502.

On claim 10: Logan recites except: A method of **claim 1**, further comprising: in response to not detecting movement of the external object in the range outside the apparatus, increasing the range for detecting movement. [0022] recites controlling the cell phone in response to determining the position of the phone with respect to another object or person and controlling notification functions of the phone accordingly.

In the analogous art of vehicle ranging and detection, Kam, [0019] and [0052] recites increasing the detection range of a vehicle sensing device when conditions obscure the detection of objects or persons in front of the vehicle.

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to include into Logan the radar detecting system of Kam to produce a system that response in a similar manner to the claimed invention. Obscuration or having the limited ability to detect objects up close is considered to be the same as not detecting an external object outside of the claimed apparatus and therefore, the concept of improving detecting capabilities to compensate for this feature is performed through extending the range of the apparatus to determine if anything beyond the first detectable range. One of ordinary skill in the art would have known/recognized this known feature and would have substituted this feature for better personnel detecting.

Prior Art

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5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Logan, U.S. 6,788,766 recites providing a cellular communication service which allows a user's cell phone to interact with another cellular phone depending on a predetermined location of the second cellular phone. See Abstract of the same.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CAL EUSTAQUIO whose telephone number is (571) 270-7229. The examiner can normally be reached on Mon -Thu 9:00 Am-5:30Pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman whose telephone number is (571) 272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. E./

Examiner, Art Unit 2683

/Brian A Zimmerman/
Supervisory Patent Examiner, Art Unit 2683